The Hammtronic is a microprocessor-controlled machine management system. This system links, monitors and controls all important machine functions and greatly frees up the machine operator for other activities. For example, the Hammtronic adjusts the diesel engine performance to the specific operating conditions (gradient, temperature, air pressure, etc.). This produces extremely low fuel consumption. Therefore, the Hammtronic is an aid to achieving the best possible compaction with optimum safety, economy and fuel savings.

1. Engine management

The hammtronic takes over the electronic engine management of the roller. Among other things, it controls the engine performance that is demanded by vibration, driving speed and operating conditions. Significantly lower noise levels make an important contribution to the environment while reduced fuel consumption helps reduce operating costs and has a positive influence on component life.

2. Drive control

The Hammtronic controls the starting and stopping of the roller using specified ramp functions. A maximum load control to protect the diesel engine from overloading and preselection of constant speeds (cruise control) are also integrated in this module.

3. Anti-slip control

Wheel spinning is a constant threat in many soil compactor applications, one that can undermine the quality of finish and waste valuable engine power and fuel. Hammtronic uses an advanced Automatic Slip Control (ASC) differential system that monitors all wheels and the drum and balances drive torque delivered to the drive motors to provide optimum traction and eliminate wheel slipping, regardless of the soil profile.
Information display

The centre of the Hammtronic system is a comprehensive control panel located in the operator compartment. The control panel draws information from sensors located strategically throughout the machine. It then uses this information to provide up-to-the-minute data on the status of key machine functions including the drive system; vibration; engine management; travel speed; gradeability; and the Automatic Slip Control. In the event of a machine failure, the control panel also pinpoints the location of the fault.

Machine operation

To meet the exact standards of your clients, you need to provide quality, consistency and reduced costs. Hammtronic helps you to achieve all of these goals by automating many of the key operating parameters including the drive system; vibration; and engine management.

By monitoring and controlling these vital functions, Hammtronic helps eliminate the possibility of operator error and allows the operator to concentrate on delivering the best possible result.

The Hammtronic ensures optimum security as well as economical and environmentally friendly operation.

4. Vibration control

The Hammtronic electronic system also regulates the hydrostatic vibration drive. Therefore, the roller always compacts at the same, preset frequency. The system automatically compensates for any difference in the amount of energy absorbed by the ground - e.g. due to fluctuations in the course thickness, composition or moisture content. If the roller needs to stop, then the Hammtronic automatically stops the vibration. This optimizes compaction performance and quality.